

Product datasheet

Specifications



servo motor BMH, Lexium 32,
30Nm, 5000rpm, keyed shaft,
without brake, IP65, IP67, 128bit
encoder

BMH1901P31A2A

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	30 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 30 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 30 N.m for LXM32MD85N4 at 32 A, 400 V, three phase 30 N.m for LXM32MD85N4 at 32 A, 480 V, three phase 30 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 30 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Peak stall torque	77.7 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 77.7 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 86.6 N.m for LXM32MD85N4 at 32 A, 400 V, three phase 86.6 N.m for LXM32MD85N4 at 32 A, 480 V, three phase 89.7 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 89.7 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal output power	4800 W for LXM32.D72N4 at 24 A, 400 V, three phase 4800 W for LXM32.D72N4 at 24 A, 480 V, three phase 5180 W for LXM32MD85N4 at 32 A, 400 V, three phase 5180 W for LXM32MD85N4 at 32 A, 480 V, three phase 5180 W for LXM32MC10N4 at 40 A, 400 V, three phase 5180 W for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal torque	18.4 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 18.4 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 16.5 N.m for LXM32MD85N4 at 32 A, 400 V, three phase 16.5 N.m for LXM32MD85N4 at 32 A, 480 V, three phase 16.5 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 16.5 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal speed	2500 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 2500 rpm for LXM32.D72N4 at 24 A, 480 V, three phase 3000 rpm for LXM32MD85N4 at 32 A, 400 V, three phase 3000 rpm for LXM32MD85N4 at 32 A, 480 V, three phase 3000 rpm for LXM32MC10N4 at 40 A, 400 V, three phase 3000 rpm for LXM32MC10N4 at 40 A, 480 V, three phase
Product compatibility	LXM32.D72N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

Complementary

Range compatibility	Lexium 32
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Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	23.2 A
Continuous power	5.24 W
Maximum current Irms	89.61 A for LXM32.D72N4
Maximum permanent current	89.6 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
key width	70 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	190 mm
Number of motor stacks	1
Torque constant	1.3 N.m/A at 120 °C
Back emf constant	87.6 V/krpm at 120 °C
Number of motor poles	5.0
Rotor inertia	67.7 kg.cm²
Stator resistance	0.24 Ohm at 20 °C
Stator inductance	2.54 mH at 20 °C
Stator electrical time constant	21.2 ms at 20 °C
Maximum radial force Fr	3730 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
type of cooling	Natural convection
Length	190 mm
Centring collar diameter	180 mm
centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	14 mm
Circle diameter of the mounting holes	215 mm
Net weight	19 kg
Sizing reference	BMH1901P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	135 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	30.0 cm

Package 1 Width	40.0 cm
Package 1 Length	79.5 cm
Package 1 Weight	19.5 kg

Contractual warranty

Warranty	18 months
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint	
Total lifecycle Carbon footprint	5665
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACH Regulation	REACH Declaration
PVC free	Yes

Use Again

Repack and remanufacture	
End of life manual availability	No need of specific recycling operations
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins